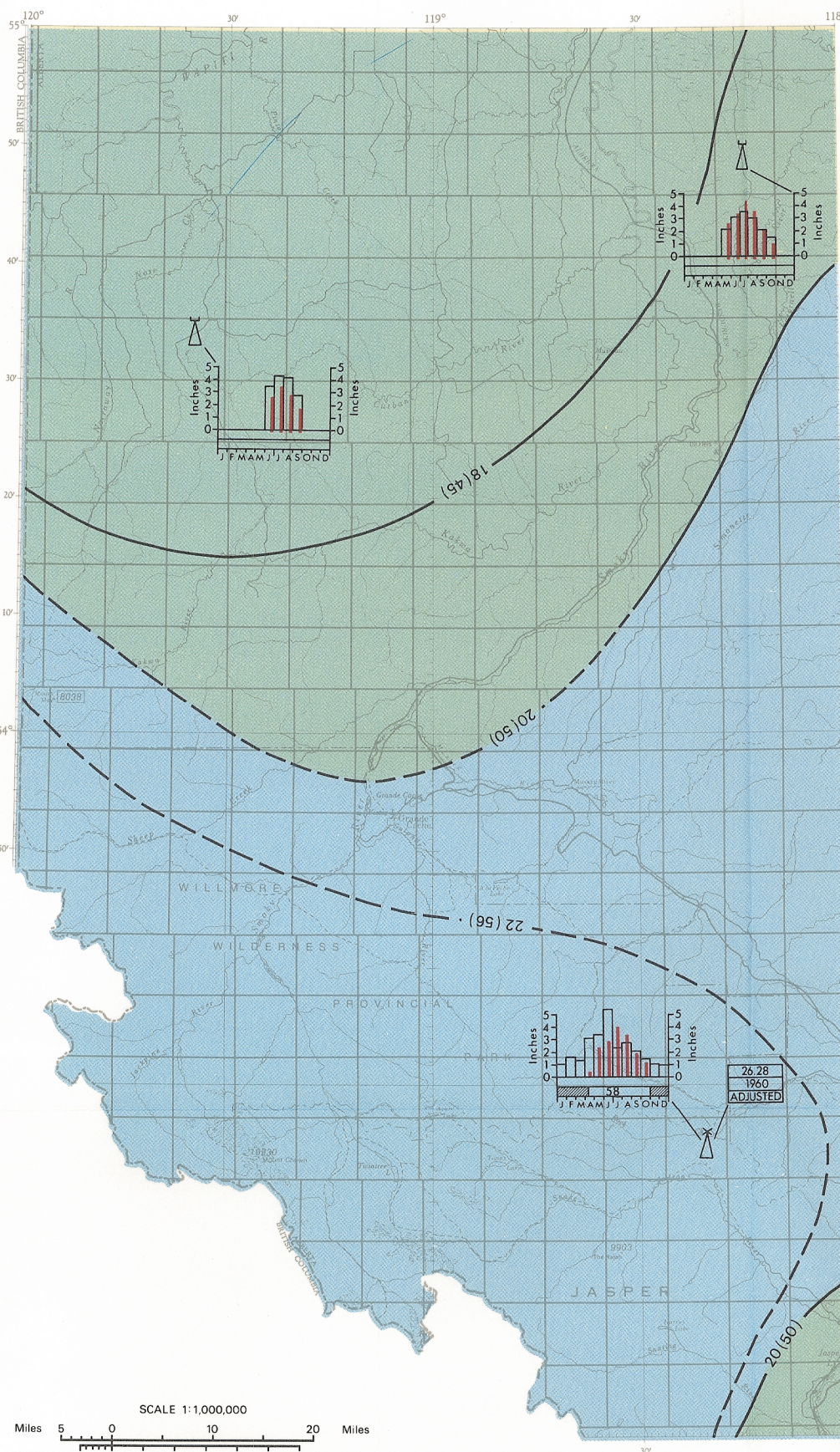


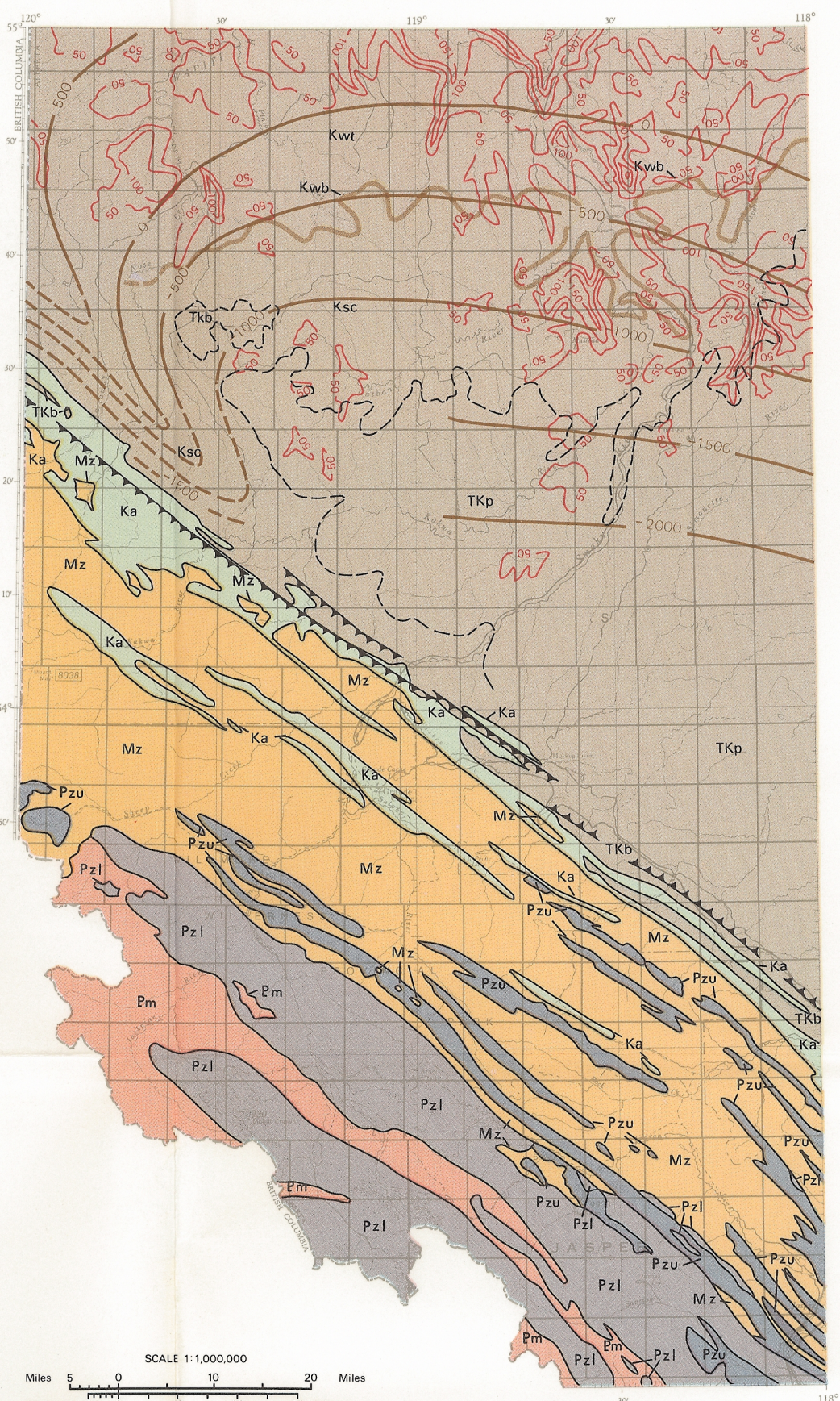
METEOROLOGY MAP



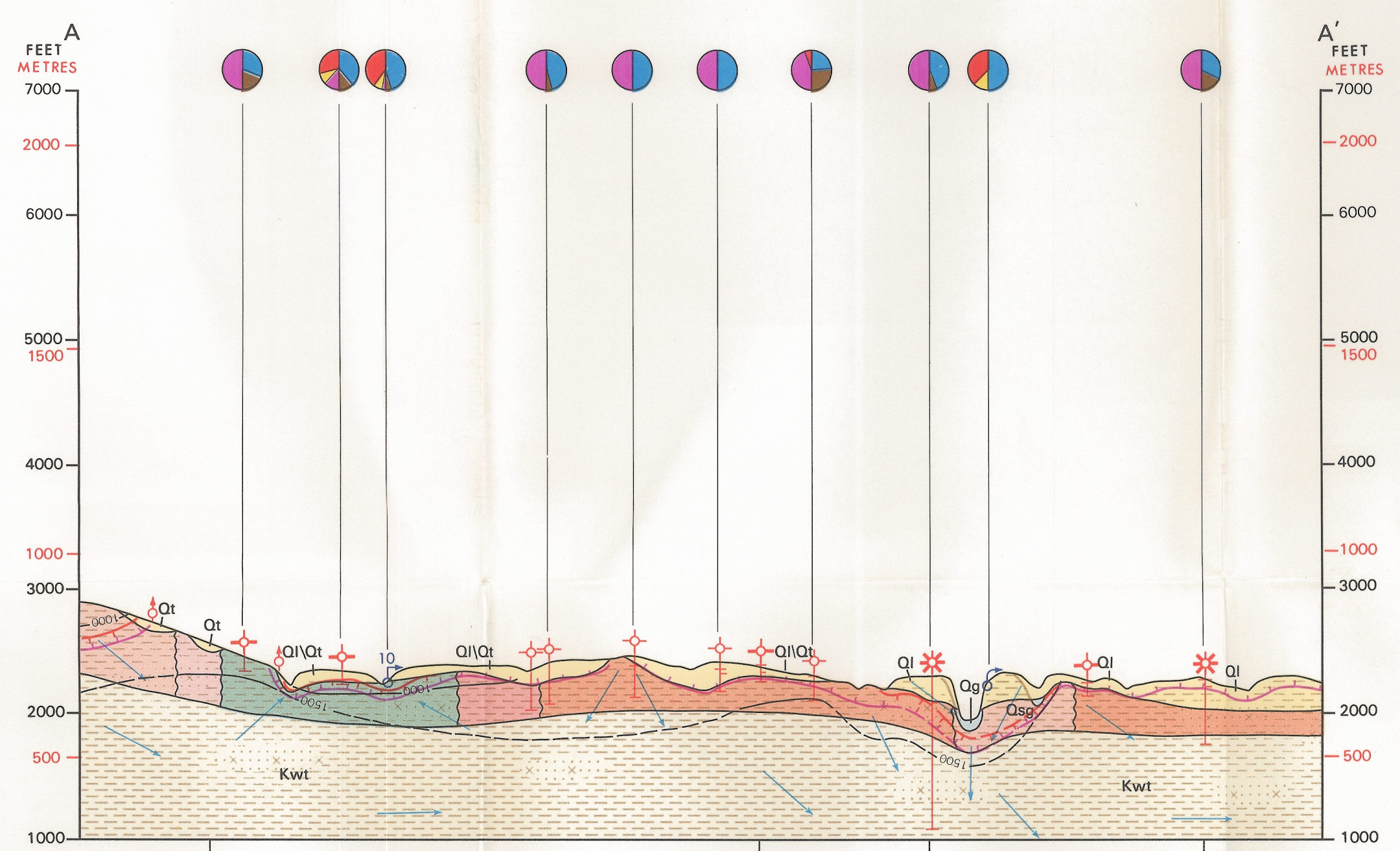
LEGEND
Isohyet, mean annual precipitation in inches (cm)
Mean annual precipitation
Meteorological station
Standard rain gauge only
Precipitation data



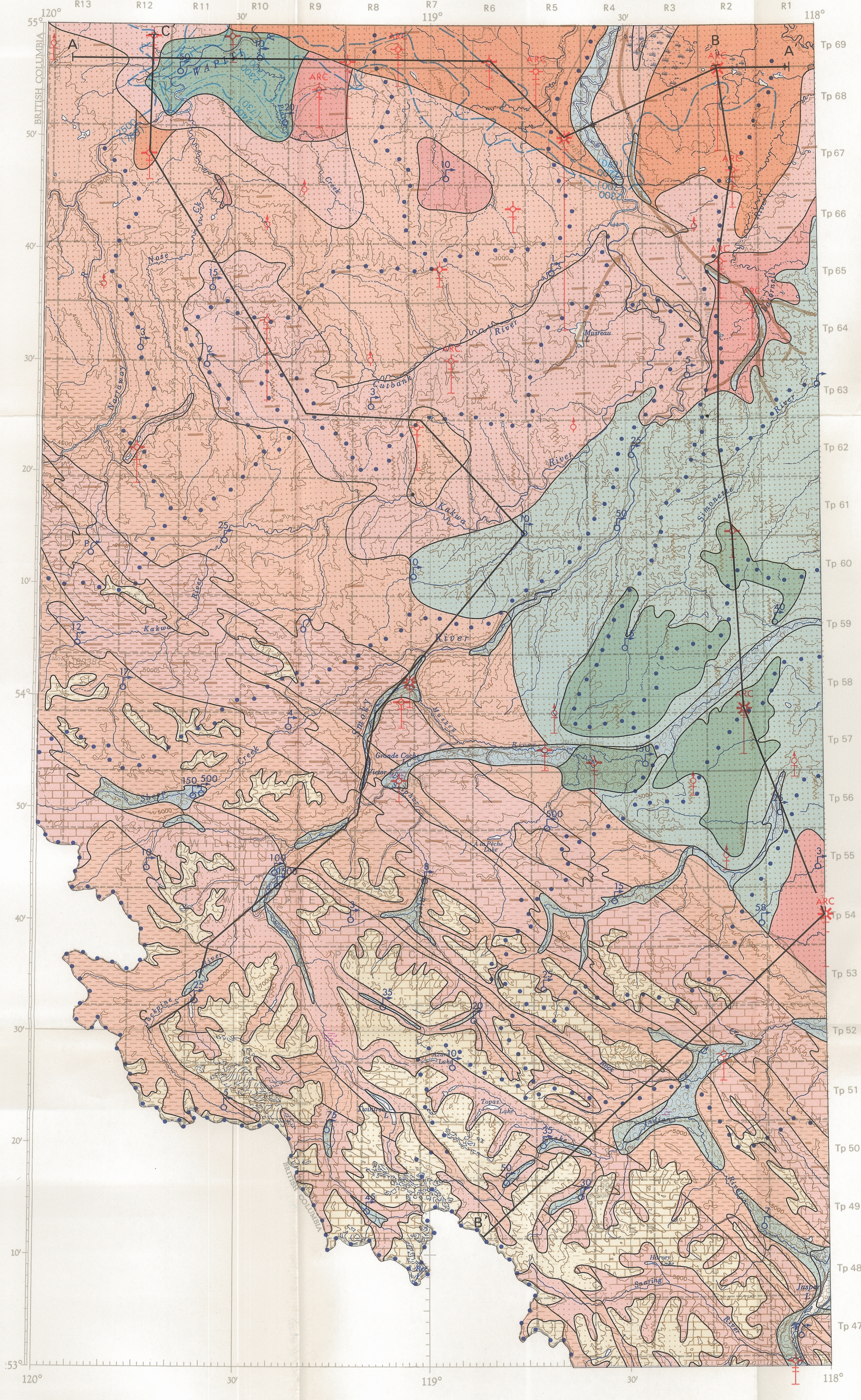
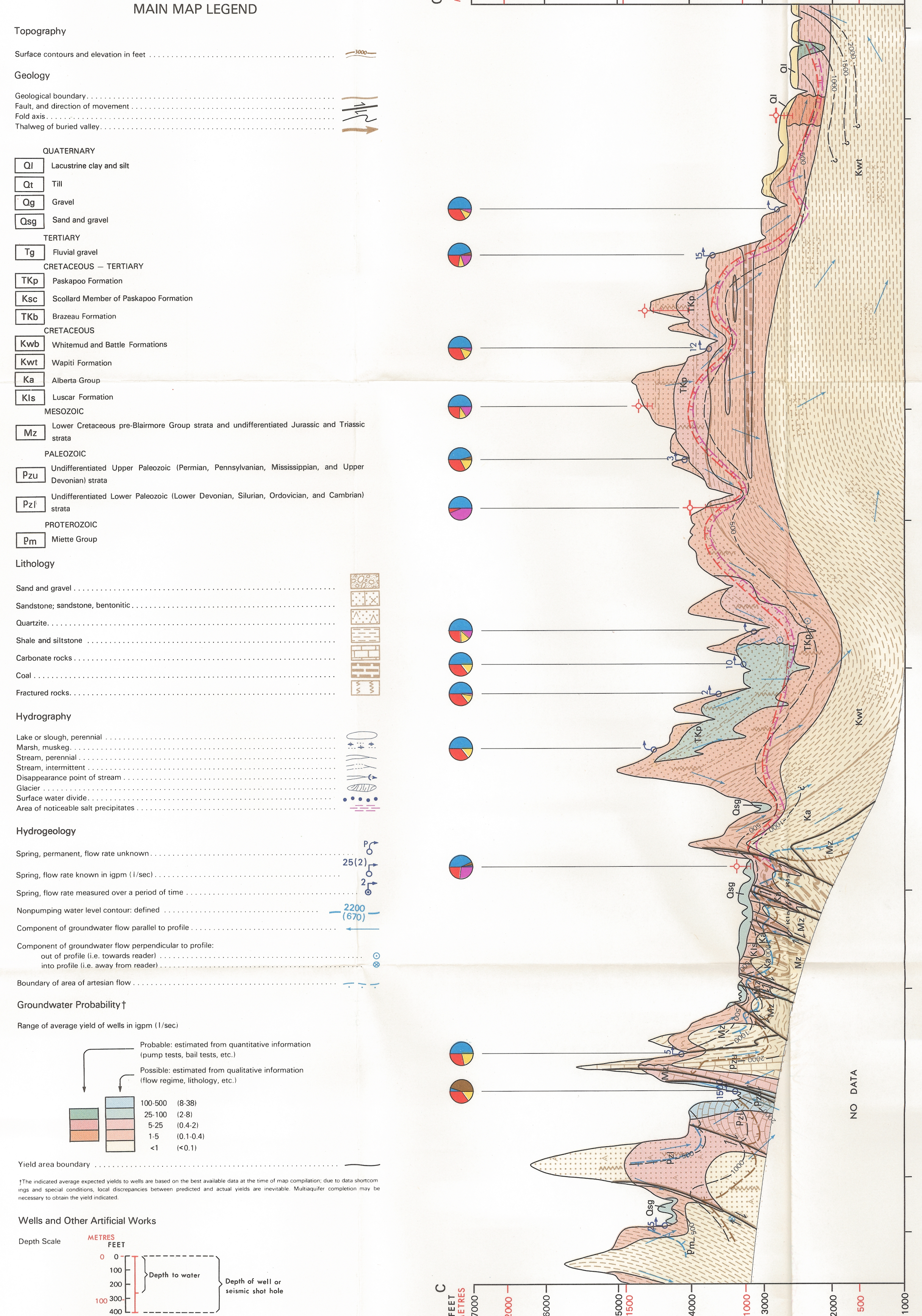
GEOLOGY MAP



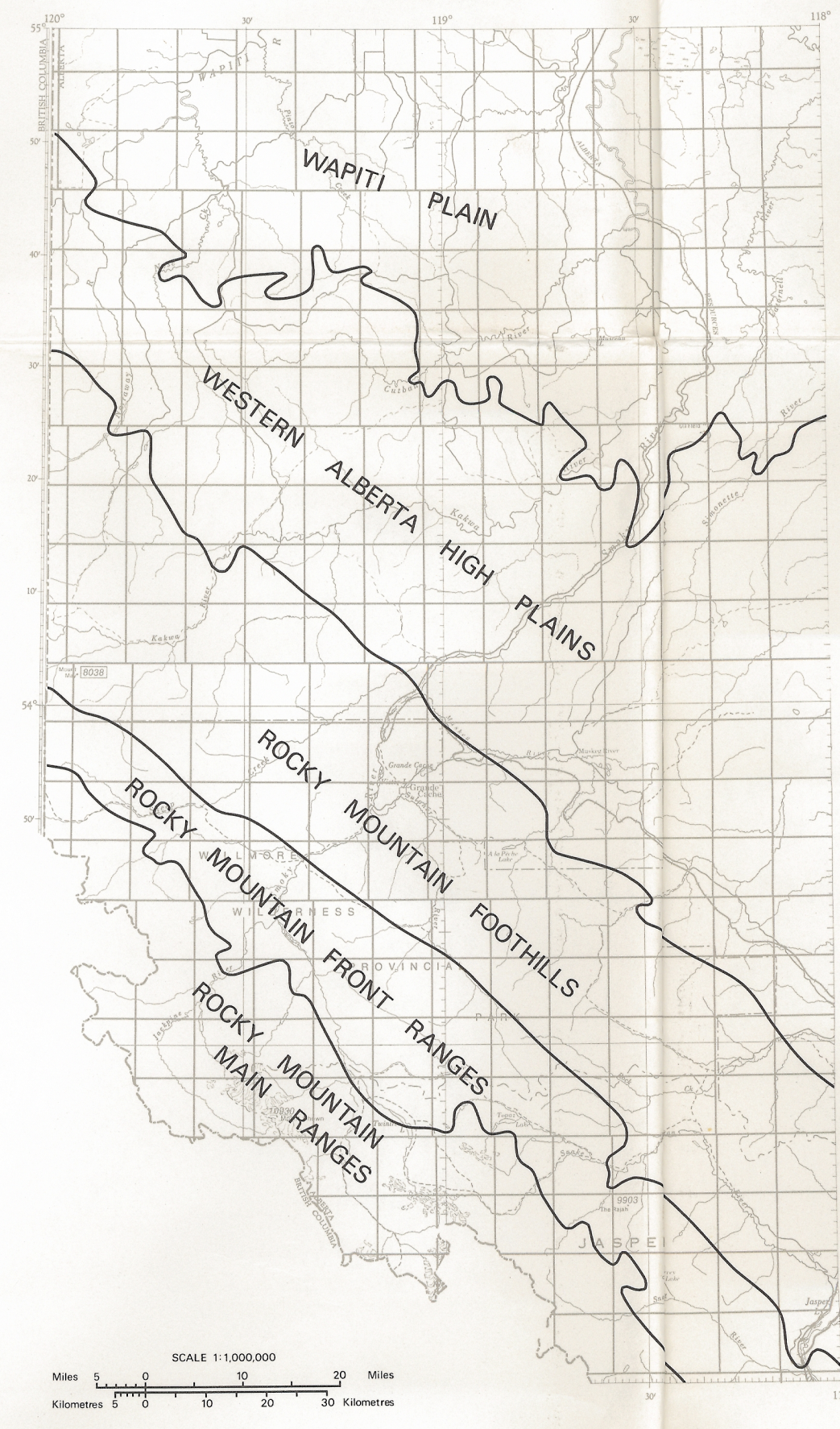
LEGEND
Purvis Formation: sandstone, siltstone, shale, and thin coal seams; Scotford Member (KsC): sandstone, shale, and major coal seams including Anley "coal zone", nonmarine
Brazos Formation: gray, fine-grained, heterolithic sandstone with hard calcareous beds; laminated siltstone and gray silty shale, calcic to marine
Whitemud and Battle Formations: pale gray, bentonitic sandstone and mudstone (Whitemud Formation); bentonitic siltstone and shale (Battle Formation)
Wapiti Formation: calcareous sandstone and shale; nonmarine
Albany Group: mainly shale
KsC: sandstone and siltstone
Undifferentiated Mesozoic: calcareous siltstone, limestone; thick-bedded cherty sandstone, shale, and coal (Lesser Formation)
Undifferentiated Upper Paleozoic: argillaceous limestone and dolomite, calcareous shale, quartzite
Undifferentiated Lower Paleozoic: quartzite, dolomite, limestone
Miocene Group: argillite with minor dolomite and limestone
Risk unit boundary: defined, approximate
Thrust fault: tooth on upper plate
Structure contour on base of Wapiti Formation (elevation in feet): defined, approximate
Isopach of drift on Wapiti Plains and parts of the Western Alberta High Plains (in feet): defined, approximate



MAIN MAP LEGEND
Topography
Surface contours and elevation in feet
Geology
Geological boundary
Fault and direction of movement
Fold axis
Thickness of buried valley
QUATERNARY
Q1 Lacustrine clay and silt
Q2 Till
Q3 Gravel
Q4 Sand and gravel
TERTIARY
Tg Fluvial gravel
CRETACEOUS - TERTIARY
TKp Purvis Formation
KwB Scotford Member of Purvis Formation
TKB Brazos Formation
CRETACEOUS
Kwb Whitemud and Battle Formations
Kwt Wapiti Formation
KA Albany Group
Kis Lesser Formation
MESOZOIC
Mz Lower Cretaceous pre-Bainiere Group strata and undifferentiated Jurassic and Triassic strata
PALEOZOIC
Pzu Undifferentiated Upper Paleozoic (Permian, Pennsylvanian, Mississippian, and Upper Devonian strata)
Pal Undifferentiated Lower Paleozoic (Lower Devonian, Silurian, Ordovician, and Cambrian) strata
PROTEROZOIC
Pm Miocene Group
Lithology
Sand and gravel
Sandstone, sandstone, bentonitic
Quartzite
Shale and siltstone
Carbonate rocks
Coal
Fractured rocks
Hydrography
Lake or slough, perennial
Marsh, intertidal
Stream, perennial
Stream, intermittent
Disappearance point of stream
Glacier
Surface water divide
Area of noticeable salt precipitates
Hydrogeology
Spring, permanent, flow rate unknown
Spring, flow rate known in lpm (l/sec)
Spring, flow rate measured over a period of time
Nonpumping water level contour defined
Component of groundwater flow parallel to profile
Component of groundwater flow perpendicular to profile: out of profile (i.e. towards reader) into profile (i.e. away from reader)
Boundary of area of artesian flow
Groundwater Probability
Range of average yield of wells in lpm (l/sec)
Probable: estimated from quantitative information (pump tests, bail tests, etc.)
Possible: estimated from qualitative information (flow regime, lithology, etc.)
Yield area boundary
Wells and Other Artificial Works
Depth Scale
Water well, confining
Water well, 20-year safe yield calculated from apparent transmissivity
Water well, 20-year safe yield calculated from pump test of sufficient length to reflect regional hydraulic conditions
Alberta Research Council test well
Seismic shot-hole reported to have flowed
Oil well
Gas well
Abandoned well, drilled for oil or gas
Depth of exploratory well
The vertical line portion of oil, gas, or other exploratory well well symbol indicates the well depth; the dashed portion indicates the test casing interval where applicable; otherwise, a solid line is used.
Line of hydrogeological profile
Hydrochemistry
Calcium
Sulfate + bicarbonate
Sulfate
Magnesium
Sodium + potassium
Chloride
Nitrate
Total dissolved solids in parts per million
Isopach along which calcium + magnesium constitutes 60 percent of total cations; teeth indicate direction of lesser calcium + magnesium content
Isopach along which sodium + potassium constitutes 60 percent of total cations; teeth indicate direction of lesser sodium + potassium content
Isopach along which carbonate + bicarbonate constitutes 60 percent of total anions; teeth indicate direction of lesser carbonate + bicarbonate content
Isopach along which sulfate constitutes 60 percent of total anions; teeth indicate direction of lesser sulfate content
Sulfate constituting over 60 percent of total anions
*Observed on an aquifer per meter base

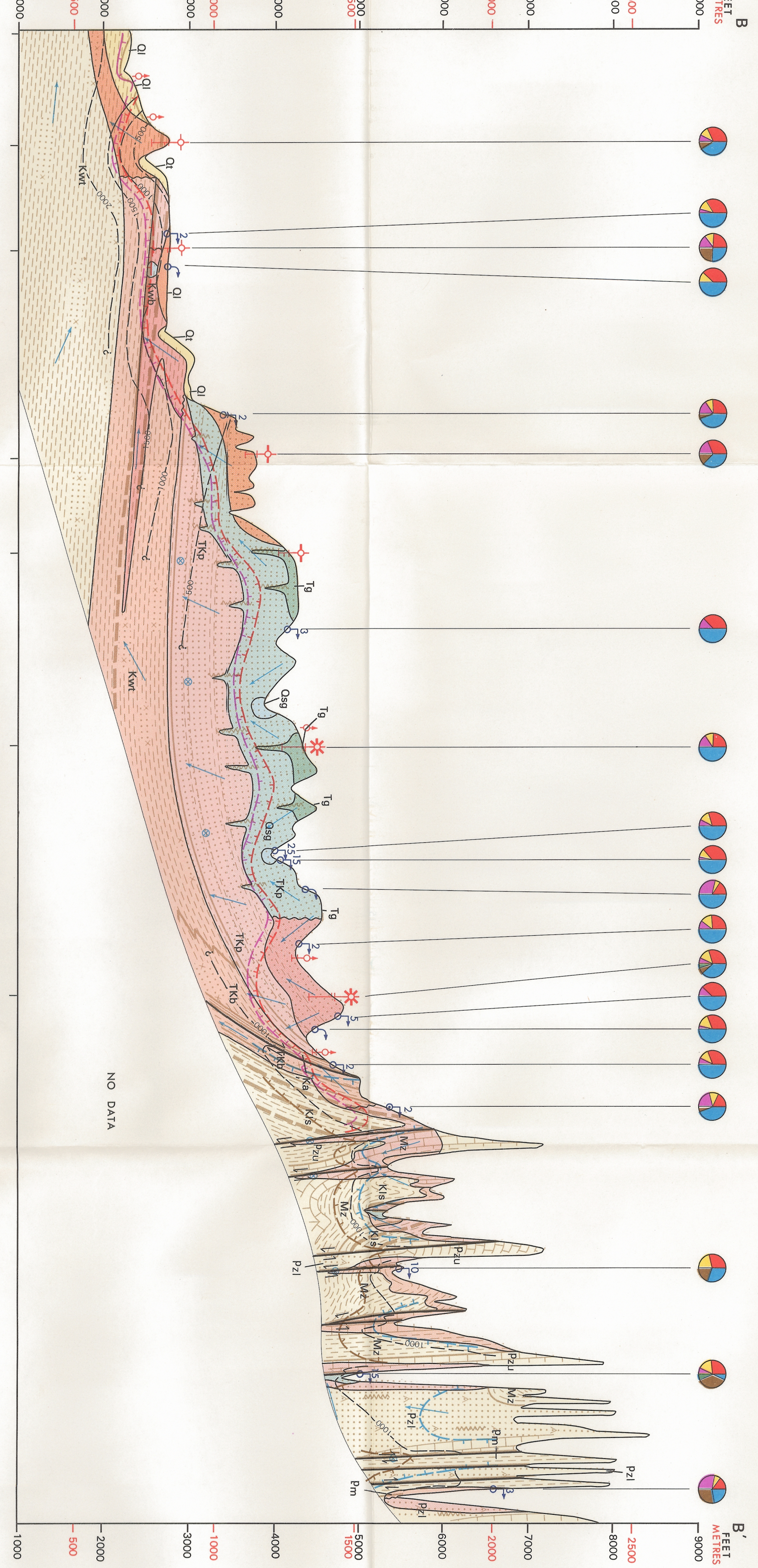


PHYSIOGRAPHY MAP



HYDROGEOLOGICAL MAP MOUNT ROBSON - WAPITI ALBERTA

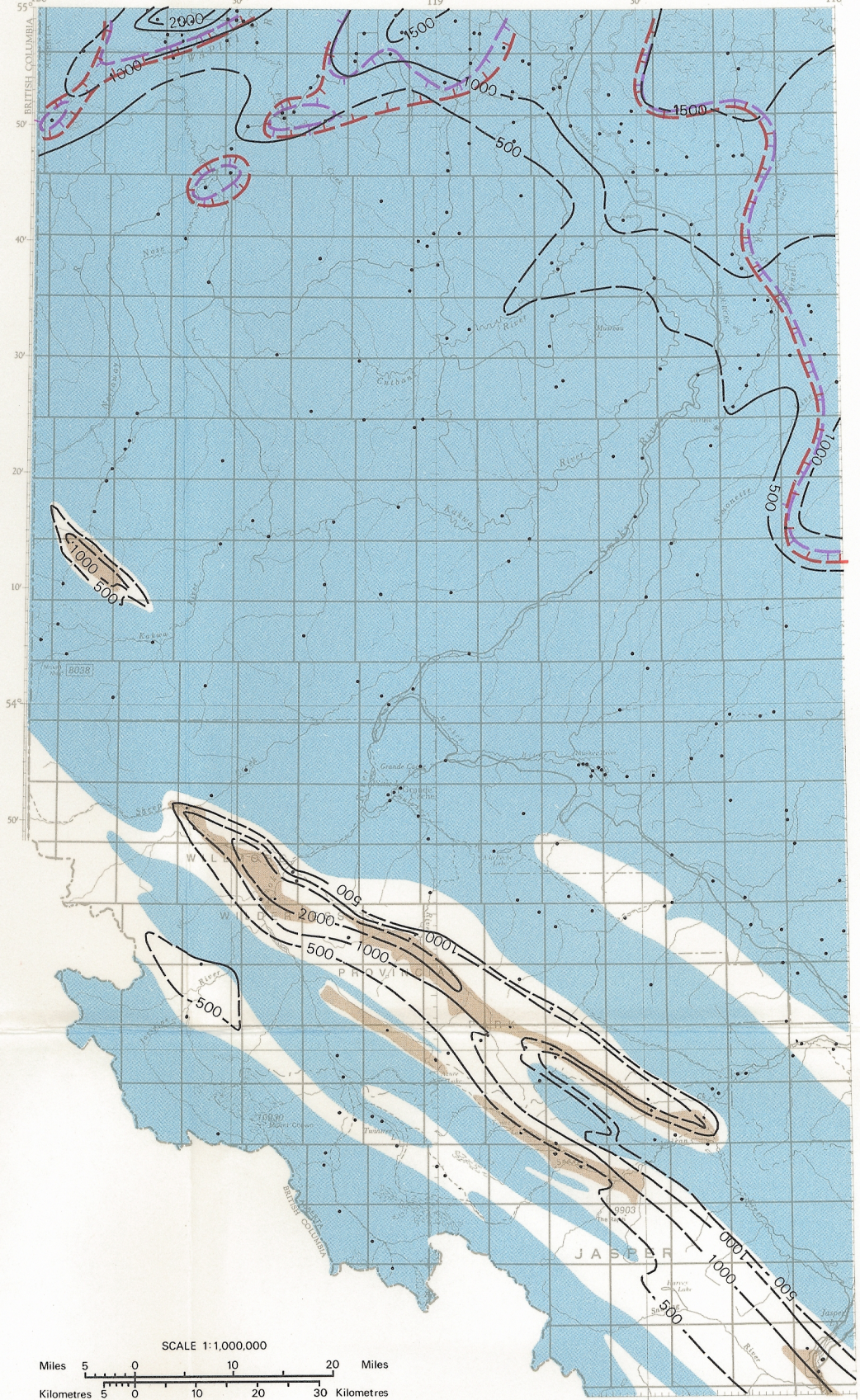
NTS 83E-83L
All elevations in feet above mean sea level
Vertical exaggeration of the hydrogeological profiles is approximately 60X
An expanded legend and explanatory notes (Report 72-12) for use with this hydrogeological map are available from Alberta Research Council, Edmonton, Canada
Map to accompany Report 76-5
Hydrogeology by R. Barnes, 1976, based on data collected in 1975
Editing by A. Campbell
Drafting by R. Swenson



DATA DENSITY MAP

LEGEND
Data control point marking the location of a well with water level information only
Data control point marking the location of a well with yield information (i.e. production test)
Data control point marking the location of a hydrogeological surface feature

HYDROCHEMISTRY MAP (of shallow bedrock aquifers)



LEGEND
Data control point
Total dissolved solids in parts per million
Isopach along which calcium + magnesium constitutes 60 percent of total cations; teeth indicate direction of lesser calcium + magnesium content
Isopach along which sodium + potassium constitutes 60 percent of total cations; teeth indicate direction of lesser sodium + potassium content
Isopach along which carbonate + bicarbonate constitutes 60 percent of total anions; teeth indicate direction of lesser carbonate + bicarbonate content
Isopach along which sulfate constitutes 60 percent of total anions; teeth indicate direction of lesser sulfate content
Sulfate constituting over 60 percent of total anions
*Observed on an aquifer per meter base

CONVERSION TABLE LOGARITHMIC SCALE

